

INTEGRATED CIRCUIT AND PACKAGE MODELING

Abstract of Disclosure

A method, system and program product for creating a simplified equivalent model for an IC that can be used for detailed analysis. The equivalent model takes into consideration the effects of all the I/O placement regardless of the non-uniformity of I/O placement. The equivalent model is generated, in part, by partitioning the IC into simulation windows and converting I/Os within each simulation window to a current source having the same current change rate, and then running a simulation on this intermediate model. A current change rate observed for a simulation window is then used to convert back to actual I/Os to create the equivalent model. The equivalent model can be simulated using conventional software, e.g., SPICE, for more detailed analysis such as signal integrity, timing of I/Os and noise.

Figures